



STATE OF MAINE  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

JOHN ELIAS BALDACCI  
GOVERNOR

DAVID P. LITTELL  
COMMISSIONER

City of Bangor,  
Bangor International Airport  
Penobscot County  
Bangor, Maine  
A-906-71-E-R/A (SM)

Departmental  
Findings of Fact and Order  
Air Emission License

After review of the air emissions license application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

**I. REGISTRATION**

**A. Introduction**

The City of Bangor, doing business as Bangor International Airport (BIA), has applied to renew their Air Emission License permitting the operation of emission sources associated with their air travel facility.

BIA has requested an amendment to their license in order to make the following changes:

1. Replace boiler DAB-1 with a new slightly smaller unit to be designated DAB-1A.
2. Add the ability to fire natural gas in each boiler.
3. Remove the parts washers from the License.
4. BIA has also installed a new biodiesel storage tank (T-6) which is defined as insignificant per 06-096 CMR 115, Appendix B, Section B(7), and is noted for informational purposes only.

**B. Emission Equipment**

The following equipment is addressed in this air emission license:

**Fuel Burning Equipment**

<u>Equipment</u>	<u>Maximum Capacity</u> <u>(MMBtu/hr)</u>	<u>Maximum Firing Rate</u> <u>(gal/hr)</u> <u>(scf/hr)</u>	<u>Fuel Type</u>	<u>Stack #</u>
Boiler IAB-1	4.18	29.9 4180	#1 or #2 fuel oil Natural Gas	IAB-1
Boiler IAB-2	4.18	29.9 4180	#1 or #2 fuel oil Natural Gas	IAB-2

AUGUSTA  
17 STATE HOUSE STATION  
AUGUSTA, MAINE 04333-0017  
(207) 287-7688 FAX: (207) 287-7826  
RAY BLDG., HOSPITAL ST.

BANGOR  
106 HOGAN ROAD, SUITE 6  
BANGOR, MAINE 04401  
(207) 941-4570 FAX: (207) 941-4584

PORTLAND  
312 CANCO ROAD  
PORTLAND, MAINE 04103  
(207) 822-6300 FAX: (207) 822-6303

PRESQUE ISLE  
1235 CENTRAL DRIVE, SKYWAY PARK  
PRESQUE ISLE, MAINE 04679-2094  
(207) 764-0477 FAX: (207) 760-3143

<b>Boiler DAB-1A</b>	<b>6.12</b>	<b>43.7</b> <b>6124</b>	<b>#1 or #2 fuel oil</b> <b>Natural Gas</b>	<b>DAB-1A</b>
Boiler 461-1	6.30	45 <b>6300</b>	<b>#1 or #2 fuel oil</b> <b>Natural Gas</b>	461-1
Boiler 462-1	6.12	43.7 <b>6124</b>	<b>#1 or #2 fuel oil</b> <b>Natural Gas</b>	462-1
Boiler 463-1	6.12	43.7 <b>6124</b>	<b>#1 or #2 fuel oil</b> <b>Natural Gas</b>	463-1
Boiler 464-1	6.28	44.9 <b>6280</b>	<b>#1 or #2 fuel oil</b> <b>Natural Gas</b>	464-1
Boiler 457-1	2.77	19.8 <b>2770</b>	<b>#1 or #2 fuel oil</b> <b>Natural Gas</b>	457-1
Boiler 268-1	2.77	19.8 <b>2770</b>	<b>#1 or #2 fuel oil</b> <b>Natural Gas</b>	268-1
Boiler 271-1	1.50	10.7 <b>1500</b>	<b>#1 or #2 fuel oil</b> <b>Natural Gas</b>	271-1
Boiler 253-1	1.50	10.7 <b>1500</b>	<b>#1 or #2 fuel oil</b> <b>Natural Gas</b>	253-1
Boiler 96-1	1.50	10.7 <b>1500</b>	<b>#1 or #2 fuel oil</b> <b>Natural Gas</b>	96-1
Boiler 100-1	2.77	19.8 <b>2770</b>	<b>#1 or #2 fuel oil</b> <b>Natural Gas</b>	100-1
Boiler 100-2	2.80	20.0 <b>2800</b>	<b>#1 or #2 fuel oil</b> <b>Natural Gas</b>	100-2
Boiler 269-1	1.58	11.4 <b>1580</b>	<b>#1 or #2 fuel oil</b> <b>Natural Gas</b>	269-1
Snow Melter #1	8.96	64	<b>#1 or #2 fuel oil</b>	fugitive

Note: DAB = Domestic Arrivals Building; IAB = International Arrivals Building; TF = Tank Farm. Numbers in Boiler names refer to the building in which the equipment is located.

### Electrical Generation Equipment

<u>Equipment</u>	<u>Maximum Capacity (MMBtu/hr)</u>	<u>Firing Rate (gal/hr)</u>	<u>Power Output (kW)</u>	<u>Fuel Type, % sulfur</u>	<u>Stack #</u>
Generator IAB-3	2.35	17	240	#1 or #2 fuel oil	IAB-3
Generator DAB-2	1.4	10.1	145	Diesel, 0.05%	DAB-2
Generator 461-2	0.75	5.4	80	Diesel, 0.05%	461-2
Generator 99-1	3.75	27	385	Diesel, 0.05%	99-1
Generator TF-1	1.68	12.1	170	Diesel, 0.05%	TF-1

**Volatile Organic Liquid Storage Tanks**

<u>Tank Name</u>	<u>Tank Type</u>	<u>Capacity (gallons)</u>	<u>Materials Stored</u>	<u>Annual Throughput (gal/year)</u>	<u>Year of Construction</u>	<u>Control Device</u>
T-1	Floating Geodome	630,000	Jet A	16,000,000	1955	None
T-2	Fixed Cone	2,000,000	Jet A	16,000,000	1955	None
T-3	Fixed Cone	630,000	Jet A	16,000,000	1955	None
T-4	Horizontal Welded	12,000	Low Lead aviation gas	150,000	1991	Vapor Recovery
T-5	Horizontal Welded	12,000	Gasoline	80,000	1991	Vapor Recovery
T-6*	Horizontal Welded	10,000	Biodiesel	-	2008	-

\* Insignificant Activity per 06-096 CMR 115, Appendix B, Section B(7)

**Process Equipment**

<u>Equipment</u>	<u>Production Rate</u>	<u>Pollution Control Equipment</u>	<u>Stack #</u>
Paint Booth P-1	1.56 gallons paint/hour	Filter	P-1

**C. Application Classification**

The modification of a minor source is considered a major modification based on whether or not expected emission increases exceed the "Significant Emission Levels" as defined in the Department's regulations. This application is determined to be a License renewal with a minor modification and has been processed as such. With the fuel oil limitation on the fuel burning equipment, the facility is licensed below the major source thresholds and is considered a synthetic minor.

**II. BEST PRACTICAL TREATMENT (BPT)**

**A. Introduction**

In order to receive a license the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in *Definitions Regulation*, 06-096 CMR 100 (last amended December 24, 2005). Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

BPT for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in *Definitions Regulation*, 06-096 CMR 100 (last amended December 24, 2005). BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impacts.

BPT for existing emissions equipment means that method which controls or reduces emissions to the lowest possible level considering:

- the existing state of technology;
- the effectiveness of available alternatives for reducing emissions from the source being considered; and
- the economic feasibility for the type of establishment involved.

B. Boilers (excluding DAB-1A)

BIA operates fourteen existing boilers, ranging in size from 1.50 to 6.30 MMBtu/hr and manufactured between 1955 and 2003. Due to their small sizes, none of the boilers are subject to the New Source Performance Standards (NSPS) Subpart Dc for steam generating units greater than 10 MMBtu/hr and manufactured after June 9, 1989. The boilers are permitted to fire distillate oil (#1 or #2 fuel oil), or natural gas.

A summary of the BPT analysis for the existing boilers when firing distillate oil is the following:

1. *Low Sulfur Fuel*, 06-096 CMR 106 (last amended June 9, 1999) regulates fuel sulfur content, however the use of #1 or #2 fuel oil that meets the criteria in ASTM D396 is more stringent and shall be considered BPT.
2. *Fuel Burning Equipment Particulate Emission Standard*, 06-096 CMR 103 (last amended November 3, 1990) regulates PM emission limits for boilers larger than 3 MMBtu/hr. A PM emission limit of 0.12 lb/MMBtu shall be considered BPT for the other boilers. The PM<sub>10</sub> limits are derived from the PM limits.
3. NOx emission limits were established in Air Emission License A-906-71-A-N (3/22/2005).
4. CO and VOC emission limits are based upon AP-42 data dated 9/98.
5. Visible emissions from each of the boilers shall not exceed 20% opacity on a 6-minute block average basis, except for no more than one 6-minute block average in a 3-hour period.

A summary of the BACT analysis for the existing boilers when firing natural gas is the following:

1. 06-096 CMR 106 regulates fuel sulfur content, however the use of natural gas is more stringent and shall be considered BACT.
2. 06-096 CMR 103 regulates PM emission limits for boilers larger than 3 MMBtu/hr. However a PM emission limit of 0.05 lb/MMBtu is more stringent and shall be considered BACT for all the existing boilers. The PM<sub>10</sub> limits are derived from the PM limits.
3. SO<sub>2</sub>, NO<sub>x</sub>, CO and VOC emission limits are based AP-42 data dated 2/98.
4. Visible emissions from the existing boilers when firing natural gas shall not exceed 10% opacity on a 6-minute block average, except for no more than one, 6-minute block average in a continuous 3-hour period.

C. Boiler DAB-1A

The new Boiler DAB-1A is a distillate oil (#1 or #2 fuel oil) and natural gas fired boiler with a maximum capacity of 6.12 MMBtu/hr. The boiler is not subject to the New Source Performance Standards (NSPS) Subpart Dc for steam generating units greater than 10 MMBtu/hr manufactured after June 9, 1989.

A summary of the BACT analysis for Boiler DAB-1A is the following:

1. 06-096 CMR 106 regulates fuel sulfur content, however in this case the use of #1 or #2 fuel oil which meets the criteria in ASTM D396, or the use of natural gas is more stringent and shall be considered BACT.
2. 06-096 CMR 103 regulates PM emission limits. However, emission limits of 0.025 lb/MMBtu (fuel oil) and 0.01 lb/MMBtu (natural gas), provided by the manufacturer, are more stringent and shall be considered BACT. PM<sub>10</sub> limits are derived from PM limits.
3. NO<sub>x</sub>, CO and VOC emission limits are based upon data provided by the manufacturer for both fuel oil and natural gas.
4. Visible emissions from the boiler when firing natural gas or distillate fuel oil shall not exceed 10% opacity on a 6-minute block average, except for no more than one, 6-minute block average in a continuous 3-hour period.

D. Snow Melter #1

BIA operates a portable (tow-behind) Snow Melter #1 to assist in runway snow removal. The snow is loaded into a water-filled melting tank incorporating a burner system that fires downward through a tube immersed in the water. Hot combustion products from the burner mix with the water and travel up through a weir tube together. At the top, the cooled gases escape to atmosphere and the warm water is sprayed over the snow to promote further melting. The unit fires

distillate fuel oil at a maximum firing rate of 64 gallons/hour. It will be used periodically throughout the winter season depending on snowfall conditions.

A summary of the BPT analysis for the Snow Melter #1 is the following:

1. The Snow Melter #1 shall be limited to 200 hours of operation per year, on a 12-month rolling total basis.
2. 06-096 CMR 106 regulates fuel sulfur content. However the use of Distillate Fuel Oil which meets the criteria in ASTM D396 is more stringent and shall be considered BPT.
3. 06-096 CMR 103 regulates PM emission limits for fuel burning units larger than 3 MMBtu/hr. The PM<sub>10</sub> limit is based on the PM emission factor.
4. NOx emission limits were established in Air Emission License A-906-71-A-N (3/22/2005).
5. CO and VOC emission limits are based upon AP-42 data dated 9/98.
6. Visible emissions from the Snow Melter #1 shall not exceed 10% opacity on a 6-minute block average basis, except for no more than one 6-minute block average in a 3-hour period.

E. Emergency Generators

BIA operates five generators. Four are classified as emergency generators. The fifth, Generator 99-1, serves as the back-up power source for the runway lighting. It is not classified as an emergency generator because its purpose requires its use under certain weather conditions that would not constitute an emergency as defined in this license. Generator IAB-3 shares a fuel tank with Boilers IAB-1 and IAB-2 and, thus, is permitted to fire distillate fuel oil. The remaining generators fire diesel fuel with a maximum sulfur content of 0.05%. All the generators were installed prior to 2006 and are not subject to NSPS, Part 60, Subpart IIII for Compression Ignition Stationary Internal Combustion Engines.

Emergency generators are only to be operated for maintenance purposes and for situations arising from sudden and reasonably unforeseeable events beyond the control of the source. Emergency generators are not to be used for prime power when reliable offsite power is available.

BPT for the generators is the following:

1. The generators shall each be limited to 500 hr/year of operation based on a 12 month rolling total.
2. 06-096 CMR 106 regulates fuel sulfur content. However, the use of distillate fuel oil which meets the criteria in ASTM D396 in Generator IAB-3, and the

use of diesel fuel with a sulfur content not to exceed 0.05% in the other generators is more stringent and shall be considered BPT.

3. Chapter 103 regulates PM limits for generator 99-1. A PM emission limit of 0.12 lb/MMBtu shall be considered BPT for the other generators. PM<sub>10</sub> emission limits for these generators are based on the PM limits.
4. NO<sub>x</sub>, CO, and VOC emission limits are based upon AP-42 data dated 10/96.
5. Visible emissions from each generator shall not exceed 20% opacity on a 6-minute block average basis, except for no more than two 6-minute block averages in a 3-hour period.

F. Volatile Organic Liquid Storage Tanks

BIA operates five above-ground storage tanks that contain volatile organic liquids. Tanks T-1, T-2 and T-3 are used to store jet kerosene, with a relatively low true vapor pressure of approximately 0.011 psia (at 70 °F). Tanks T-4 and T-5 store aviation gasoline and mobile gasoline, respectively. Gasoline has relatively high volatility; its true vapor pressure exceeds 1.52 psia (at 70 °F).

Tanks T-1, T-2 and T-3 are not subject to NSPS 40 CFR 60 Subpart Kb (Standards of Performance for Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984) as long as they store only jet kerosene, per §60.110b(c) of the subpart, due to their large size, age and the low volatility of the jet kerosene. Storage of jet kerosene only in Tanks T-1, T-2 and T-3 is considered BPT for the tanks. BIA shall keep records of tank throughput for inventory purposes.

Tanks T-4 and T-5 are not subject to Subpart Kb, because their capacity is less than 75 cubic meters (19,812 gallons). BIA shall keep readily available records showing the dimensions of tanks T-4 and T-5 and analyses showing the capacities of the storage vessels. These records shall be kept for the life of the tanks.

Tanks T-4 and T-5 are not subject to *Petroleum Liquids Transfer Vapor Recovery at Bulk Gasoline Plants*, 06-096 CMR 133 (last amended July 11, 1994), as they do not meet the definition of a "bulk gasoline plant" as defined by 06-096 CMR 100.

*Gasoline Dispensing Facilities Vapor Control*, 06-096 CMR 118 (last amended July 25, 1995) regulates the control of vapors from gasoline dispensing facilities. Gasoline storage tanks T-4 and T-5 meet the definition of a gasoline dispensing facility from 06-096 CMR 118:

"Gasoline dispensing facility" means any site where gasoline is transferred from a stationary storage tank to motor vehicle fuel tank used to provide fuel to the engine of that motor vehicle.

06-096 CMR 118 requires the maintenance and use of a Stage I vapor balance system consisting of appropriate connectors at both the storage tank and the tank truck such that a complete closed vapor loop is formed, and a submerged fill pipe extending into each tank to within six inches of the bottom. The Department finds compliance with Chapter 118 to be BPT for Tanks T-4 and T-5. BIA shall keep records of gasoline throughput in Tanks T-4 and T-5.

G. Paint Spray Booth

BIA operates a paint spray booth for painting of ground service equipment such as luggage carts and tugs. Paint is applied within the booth using a high volume – low pressure spray designed to minimize VOC emissions. Exhaust from the painting area passes through filters before it is introduced to the atmosphere. The facility accepts a VOC limit of 1,500 lbs per calendar month, and 9.0 TPY from the Paint Spray Booth. Maintaining this limit will exempt BIA from the coating emission limitations in *Surface Coating Facilities*, 06-096 CMR 129, (last amended March 3, 1998). Compliance with the VOC limit shall be demonstrated through records maintained on a monthly and 12-month rolling total basis, showing the amount of each type of coating used, percent VOC of the coating (from the MSDS sheet), coating weight and total VOC emitted through use of that coating. BIA also accepts a HAP limit of 6.75 tons/year from the Paint Spray Booth, on a 12-month rolling total basis. Compliance with the HAP limit shall be demonstrated through records maintained on a monthly and 12-month rolling total basis, showing amount of each type of coating used, HAP content of the coating (from the MSDS sheet), coating weight and total HAPs emitted through use of that coating.

When the Paint Spray Booth is used to paint mobile equipment it is subject to the requirements of *Mobile Equipment Repair and Refinishing*, 06-096 CMR 153 (last amended February 25, 2004).

Visible emissions from the Paint Spray Booth exhaust shall not exceed 10 percent opacity on a 6-minute block average basis, except for no more than one 6-minute block average in a 1-hour period.

The use of high volume – low pressure spray applicators and exhaust filters, a VOC limit of 1,500 lbs. per calendar month and 9.0 TPY, following the work practice and other requirements of 06-096 CMR 153, and the an opacity limit of 10% constitutes BPT for the Paint Spray Booth.



H. Annual Emissions

Annual emissions are calculated on a 12-month rolling total and are based on the following:

1. BIA shall be limited to 200 hours of operation of the snow melter, and 500 hours of operation of each generator
2. The boilers shall be limited to a total of 98,000 MMBtu of fuel fired on a 12 month rolling total. This equates to approximately 700,000 gallons of distillate fuel oil, or 98 MMscf of natural gas.
3. Emissions from the boilers are calculated based on the worst case scenario of firing 100% distillate oil for PM, SO<sub>2</sub>, and NO<sub>x</sub>, and firing 100% natural gas for CO and VOC.
4. BIA shall be limited to the emission of 1,500 lbs. of VOC per calendar month and 6.75 tons/year of HAP on a 12-month rolling total basis from the Paint Spray Booth.
5. BIA shall be restricted to the following annual emissions, based on a 12 month rolling total:

**Total Licensed Annual Emissions for the Facility**

**Tons/year**

(used to calculate the annual license fee)

	PM	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	VOC	HAP
Snow Melter	0.11	0.11	0.45	0.23	0.04	0.01	-
Boilers	5.88	5.88	24.68	12.25	4.12	0.27	
Generator IAB-3	0.07	0.07	0.30	2.60	0.56	0.21	-
Generator DAB-2	0.04	0.04	0.02	1.55	0.34	0.13	-
Generator 461-2	0.06	0.06	0.01	0.83	0.18	0.07	-
Generator 99-1	0.12	0.12	0.05	4.14	0.90	0.33	-
Generator TF-1	0.13	0.13	0.03	1.86	0.40	0.15	-
Paint Spray Booth	--	--	--	--	--	9.0	6.75
Jet A Tanks	--	--	--	--	--	0.3	-
Gasoline Storage/Loading	--	--	--	--	--	1.98	-
<b>Total TPY</b>	<b>6.41</b>	<b>6.41</b>	<b>25.54</b>	<b>23.46</b>	<b>6.54</b>	<b>12.45</b>	<b>6.75</b>

**III. AMBIENT AIR QUALITY ANALYSIS**

According to the 06-096 CMR 115, the level of air quality analyses required for a minor source shall be determined on a case-by case basis. Based on the information available in the file, and the similarity to existing sources, Maine Ambient Air Quality Standards (MAAQS) will not be violated by this source.

### ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-906-71-E-R/A subject to the following conditions:

Severability. The invalidity or unenforceability of any provision, or part thereof, of this License shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

### STANDARD CONDITIONS

- (1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions (38 M.R.S.A. §347-C).
- (2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 115. [06-096 CMR 115]
- (3) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both. [06-096 CMR 115]
- (4) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request. [06-096 CMR 115]

- (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S.A. §353. [06-096 CMR 115]
- (6) The license does not convey any property rights of any sort, or any exclusive privilege. [06-096 CMR 115]
- (7) The licensee shall maintain and operate all emission units and air pollution systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions. [06-096 CMR 115]
- (8) The licensee shall maintain sufficient records to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request. [06-096 CMR 115]
- (9) The licensee shall comply with all terms and conditions of the air emission license. The filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for a renewal of a license or amendment shall not stay any condition of the license. [06-096 CMR 115]
- (10) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license. [06-096 CMR 115]
- (11) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:
  - A. perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:
    1. within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions; or
    2. pursuant to any other requirement of this license to perform stack testing.
  - B. install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and

- C. submit a written report to the Department within thirty (30) days from date of test completion.  
[06-096 CMR 115]
- (12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate emissions in excess of the applicable standards, then:
- A. within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and
  - B. the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and
  - C. the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.
- [06-096 CMR 115]
- (13) Notwithstanding any other provisions in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement. [06-096 CMR 115]
- (14) The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself that would affect emission and that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two (2) days or the next state working day, whichever is later, of such occasions where such changes result in an increase of emissions. The licensee shall report all excess emissions in the units of the applicable emission limitation.  
[06-096 CMR 115]
- (15) Upon written request from the Department, the licensee shall establish and maintain such records, make such reports, install, use and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such a manner as the Department shall

prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status. [06-096 CMR 115]

### **SPECIFIC CONDITIONS**

#### **(16) Boilers**

- A. The Boilers at BIA may fire Natural Gas or #1 or #2 fuel oil which meets the criteria in ASTM D396. Records from the supplier documenting fuel type shall be kept for compliance purposes. [06-096 CMR 115, BPT, BACT]
- B. Emissions shall not exceed the following:

<b>Emission Unit</b>	<b>Pollutant</b>	<b>lb/MMBtu</b>	<b>Origin and Authority</b>
Boiler IAB-1	PM	0.12 oil 0.05 gas	06-096 CMR 103, Section 2(B)(1)(a), BPT
Boiler IAB-2	PM	0.12 oil 0.05 gas	06-096 CMR 103, Section 2(B)(1)(a), BPT
Boiler DAB-1A	PM	0.025 oil 0.01 gas	06-096 CMR 103, Section 2(B)(1)(a), BACT
Boiler 461-1	PM	0.12 oil 0.05 gas	06-096 CMR 103, Section 2(B)(1)(a), BPT
Boiler 462-1	PM	0.12 oil 0.05 gas	06-096 CMR 103, Section 2(B)(1)(a), BPT
Boiler 463-1	PM	0.12 oil 0.05 gas	06-096 CMR 103, Section 2(B)(1)(a), BPT
Boiler 464-1	PM	0.12 oil 0.05 gas	06-096 CMR 103, Section 2(B)(1)(a), BPT

C. Emissions shall not exceed the following when firing fuel oil. [06-096 CMR 115, BPT, BACT]:

Emission Unit	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler IAB-1	0.50	0.50	2.10	1.05	0.15	0.02
Boiler IAB-2	0.50	0.50	2.10	1.05	0.15	0.02
Boiler DAB-1A	0.15	0.15	3.08	1.14	0.24	0.01
Boiler 461-1	0.76	0.76	3.17	1.58	0.23	0.03
Boiler 462-1	0.73	0.73	3.08	1.53	0.22	0.02
Boiler 463-1	0.73	0.73	3.08	1.53	0.22	0.02
Boiler 464-1	0.75	0.75	3.16	1.57	0.23	0.02
Boiler 457-1	0.33	0.33	1.39	0.69	0.10	0.01
Boiler 268-1	0.33	0.33	1.39	0.69	0.10	0.01
Boiler 271-1	0.18	0.18	0.76	0.38	0.05	0.01
Boiler 253-1	0.18	0.18	0.76	0.38	0.05	0.01
Boiler 96-1	0.18	0.18	0.76	0.38	0.05	0.01
Boiler 100-1	0.33	0.33	1.39	0.69	0.10	0.01
Boiler 100-2	0.34	0.34	1.41	0.70	0.10	0.01
Boiler 269-1	0.19	0.19	0.80	0.40	0.06	0.01

D. Emissions shall not exceed the following when firing natural gas. [06-096 CMR 115, BPT, BACT]:

Emission Unit	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler IAB-1	0.21	0.21	0.01	0.42	0.35	0.02
Boiler IAB-2	0.21	0.21	0.01	0.42	0.35	0.02
Boiler DAB-1A	0.06	0.06	0.01	0.43	0.24	0.02
Boiler 461-1	0.32	0.32	0.01	0.63	0.53	0.03
Boiler 462-1	0.31	0.31	0.01	0.61	0.51	0.03
Boiler 463-1	0.31	0.31	0.01	0.61	0.51	0.03
Boiler 464-1	0.31	0.31	0.01	0.63	0.53	0.03
Boiler 457-1	0.14	0.14	0.01	0.28	0.23	0.02
Boiler 268-1	0.14	0.14	0.01	0.28	0.23	0.02
Boiler 271-1	0.08	0.08	0.01	0.15	0.13	0.01
Boiler 253-1	0.08	0.08	0.01	0.15	0.13	0.01
Boiler 96-1	0.08	0.08	0.01	0.15	0.13	0.01
Boiler 100-1	0.14	0.14	0.01	0.28	0.23	0.02
Boiler 100-2	0.14	0.14	0.01	0.28	0.24	0.02
Boiler 269-1	0.08	0.08	0.01	0.15	0.13	0.01

- E. Visible emissions from each of the boilers shall not exceed 10% opacity on a 6-minute block average, except for no more than one 6-minute block average in a 3-hour period. [06-096 CMR 101, BPT, BACT]

(17) **Snow Melter #1**

- A. The Snow Melter #1 may fire #1 or #2 fuel oil which meets the criteria in ASTM D396. Records from the supplier documenting type of fuel delivered shall be kept for compliance purposes. [06-096 CMR 115, BPT]
- B. The Snow Melter #1 shall not exceed 200 hours per year of operation, on a 12-month rolling total basis. BIA shall record Snow Melter #1 operation time in a log to demonstrate compliance. [06-096 CMR 115, BPT]
- C. Emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Snow Melter #1	PM	0.12	06-096 CMR 103, Section 2(B)(1)(a)

- D. Emissions shall not exceed the following:

Emission Unit	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Snow Melter #1	1.08	1.08	4.51	2.24	0.32	0.04

- E. Visible emissions from the Snow Melter #1 shall not exceed 10% opacity on a 6-minute block average basis, except for no more than one 6-minute block average in a 3-hour period. [06-096 CMR 101, BPT]

(18) **Generators**

- A. BIA shall limit each generator to 500 hours/year of operation (based on a 12-month rolling total). An hour meter shall be maintained and operated on each generator. [06-096 CMR 115, BPT]
- B. Generators IAB-3, DAB-2, 461-1 and TF-1 are classified as emergency generators. The emergency generators shall only be operated for maintenance purposes and for situations arising from sudden and reasonably unforeseeable events beyond the control of the source. The emergency generators shall not to be used for prime power when reliable offsite power is available. A log documenting the dates, times, and reasons of operation for each emergency generator shall be kept. [06-096 CMR 115, BPT]

- C. Generator 99-1 is not an emergency unit, as its purpose requires its use under certain non-emergency weather conditions. Generator 99-1 shall not exceed 500 hours/year of operation (on a 12-month rolling total). A log documenting the date, time and reason for operation of the generator shall be kept. [06-096 CMR 115, BPT]
- D. Generators DAB-2, 461-1, TF-1 and 99-1 shall fire diesel fuel with a sulfur content not to exceed 0.05% by weight. Compliance shall be based on fuel receipts and/or records from the supplier documenting the quantity of fuel delivered and the percent sulfur of the fuel. [06-096 CMR 115, BPT]
- E. Generator IAB-3 shares a fuel tank with the IAB Boilers. Generator IAB-3 shall fire #2 fuel oil which meets the criteria in ASTM D396. Compliance shall be based on fuel receipts and/or records from the supplier documenting the type of fuel delivered. [06-096 CMR 115, BPT]
- F. Emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Generator 99-1	PM	0.12	06-096 CMR 103, Section 2(B)(1)(a)

- G. Emissions shall not exceed the following [06-096 CMR 115, BPT]:

Emission Unit	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Generator IAB-3	0.28	0.28	1.18	10.37	2.24	0.83
Generator DAB-2	0.17	0.17	0.08	6.18	1.33	0.49
Generator 461-2	0.09	0.09	0.04	3.31	0.72	0.27
Generator 99-1	0.45	0.45	0.20	16.54	3.57	1.32
Generator TF-1	0.20	0.20	0.09	7.41	1.60	0.59

- H. Visible emissions from each generator shall not exceed 20% opacity on a 6-minute block average basis, except for no more than two 6-minute block averages in a 3-hour period. [06-096 CMR 101, BPT]

(19) **Facility Fuel Limit**

BIA shall not exceed a total of 98,000 MMBtu of fuel (either distillate fuel oil or natural gas) on a 12 month rolling total basis in the boilers, the snow melter, and generator IAB-3. Compliance shall be demonstrated by fuel receipts and/or records from the supplier showing the quantity of fuel delivered and calculated using the following fuel heat content factors:



Distillate fuel oil – 0.14 MMBtu/gallon

Natural Gas – 0.001 MMBtu/scf

Records of annual fuel use shall be kept on a 12-month rolling total basis. [06-096 CMR 115(4)(B)(4)(d)]

**(20) Volatile Organic Liquid Storage Tanks**

- A. Tanks T-1, T-2 and T-3 shall be used to store only jet kerosene or other volatile organic liquid with a true vapor pressure of less than 3.5 kPA. BIA shall submit an application for amendment if the tanks will be used to store a volatile organic liquid with a true vapor pressure greater than 3.5 kPA, and the tanks may then be subject to NSPS 40 CFR 60, Subpart Kb. As operated, the tanks are not subject to Subpart Kb. [06-096 CMR 115, BPT]
- B. BIA shall keep records of total kerosene throughput on a 12-month rolling total basis in Tanks T-1, T-2 and T-3. [06-096 CMR 115, BPT]
- C. BIA shall keep readily available records showing the dimensions of Tanks T-4 and T-5 and analyses showing the capacities of the storage vessels. These records shall be kept for the life of the tanks. [40 CFR 60 §60.116b(b)]
- D. Tank T-5 is subject to the requirements of 06-096 CMR 118, and shall be loaded and unloaded in accordance with the chapter. Loading and unloading in accordance with 06-096 CMR 118 is determined to be BPT for Tank T-4.
  1. BIA shall not permit deliveries to Tanks T-4 and T-5 unless the tanks are each equipped with a submerged fill pipe that extends into the stationary gasoline storage tank to within six inches of the bottom of the tank. [06-096 CMR 118(3)(A), 06-096 CMR 115, BPT]
  2. BIA shall maintain a Stage I vapor balance system (as defined in 06-096 CMR 118) on Tanks T-4 and T-5. [06-096 CMR 118(3)(B), 06-096 CMR 115, BPT]
    - i. In order to insure that the vapor balance system is maintained in good working order, BIA shall inspect the following system components on a weekly basis, and take corrective action as necessary: [06-096 CMR 115, BPT]
      - a. the fill and vapor recovery caps and gaskets to insure that they are in good working order; and,
      - b. the vapor recovery poppet to insure it seals properly.
    - ii. BIA shall record the date, result of the inspection, and any corrective action necessary or taken, in a logbook.
  3. BIA shall maintain gasoline throughput records that will allow the monthly and annual throughput of Tanks T-4 and T-5 to be determined. [06-096 CMR 118(9)(B), 06-096 CMR 115, BPT]

(21) **Paint Spray Booth**

- A. Emissions from the Paint Spray Booth shall be limited to 1,500 lbs. VOC per calendar month and 9.0 tons of VOC per year, on a 12-month rolling total basis. Compliance with the VOC limits shall be demonstrated through records maintained on a monthly and 12-month rolling total basis, showing amount of each type of coating used, percent VOC of the coating (from the MSDS sheet), coating weight and total VOC emitted through use of that coating. [06-096 CMR 115, BPT]
- B. Emissions from the Paint Spray Booth shall be 6.75 tons/year total HAPs, on a 12-month rolling total basis. Compliance with the HAP limit shall be demonstrated through records maintained on a monthly and 12-month rolling total basis, showing the amount of each type of coating used, percent HAP (from the MSDS sheet), and amount of HAP emitted. [06-096 CMR 115, BPT]
- C. BIA shall keep records demonstrating that the Paint Spray Booth meets the VOC emission limit of 1,500 lbs. per month. Successful demonstration that this limit is being met serves to exempt BIA from the VOC content requirements of 06-096 CMR 129.
- D. The Paint Spray Booth is subject to the requirements of 06-096 CMR 153 when it is used to repair and refinish mobile equipment. BIA shall operate the Paint Spray Booth in accordance with the work practices and requirements from 06-096 CMR 153. [06-096 CMR 153, 06-096 CMR 115, BPT]
  1. Finish materials shall be applied using one or more of the following application techniques:
    - i. Flow/curtain coating;
    - ii. Dip coating;
    - iii. Roller coating;
    - iv. Brush coating;
    - v. Cotton-tipped swab coating;
    - vi. Electrodeposition coating
    - vii. High volume low pressure (HVLP) spraying;
    - viii. Electrostatic spray;
    - ix. Airless spray; or,
    - x. Other coating application methods that the person has demonstrated and the Department has determined achieve emission reductions equivalent to HVLP or electrostatic spray application methods.
  2. Finish materials include: automotive pretreatment primer, automotive primer-surfacer, automotive primer-sealer, automotive topcoat, single-stage topcoat, 2-stage basecoat/clearcoat, 3 or 4 stage basecoat/topcoat, automotive multi-colored topcoat, automotive specialty;

City of Bangor,  
Bangor International Airport  
Penobscot County  
Bangor, Maine  
A-906-71-E-R/A (SM)

Departmental  
Findings of Fact and Order  
Air Emission License

19

E. Visible emissions from the Paint Spray Booth exhaust shall not exceed 10 percent opacity on a 6-minute block average basis, except for no more than one 6-minute block average in a 1-hour period. [06-096 CMR 101, BPT]

(22) **General Process Sources**

Visible emissions from any general process source not specifically listed in this Order shall not exceed 20% opacity on a 6-minute block average basis, except for no more than one 6-minute block average in a 1-hour period. [06-096 CMR 101]

(23) BIA shall notify the Department within 48 hours and submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component causes a violation of any emission standard. [38 MRSA §605]

DONE AND DATED IN AUGUSTA, MAINE THIS 27th DAY OF May, 2010.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: James P. Brashers  
DAVID P. LITTLE, COMMISSIONER

**The term of this license shall be five (5) years from the signature date above.**

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 2/12/2009

Date of application acceptance: 3/6/2009

Date filed with the Board of Environmental Protection:

This Order prepared by Jonathan Voisine, Bureau of Air Quality.



